UK Patent Application (19) GB (11) 2 255 485(13) A

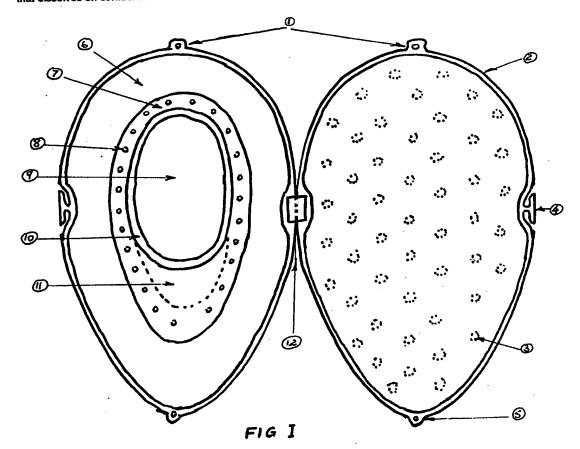
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- (71) Applicant Anders Roy Hargrave Skarsten 36 Reynards Road, Welwyn, Hertfordshire, AL6 9TP, United Kingdom
- (72) Inventor Anders Roy Hargrave Skarsten
- (74) Agent and/or Address for Service Anders Roy Hargrave Skarsten 36 Reynards Road, Welwyn, Hertfordshire, ALS 9TP, United Kingdom

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- (56) Documents cited GB 1261294 A **GB 2194721 A** GB 2226743 A US 4023300 A GB 1119272 A GB 1226912 A
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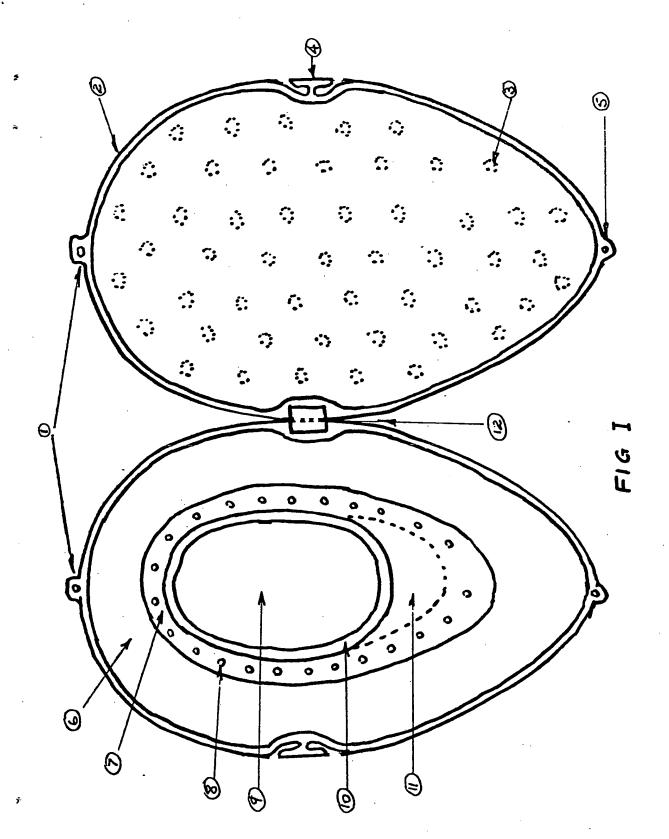
(54) Fish balt container

(57) An aerodynamic bait container of two complementary halves, is attached to the line and substitutes for the standard casting weights currently employed. There is a residual weight to anchor its position when the container springs open when in the water. At casting the container is held shut against its spring hinge by means of poly vinyl alchohol or similar material that dissolves on contact with water. The container itself may be made of an organic soluble substance.



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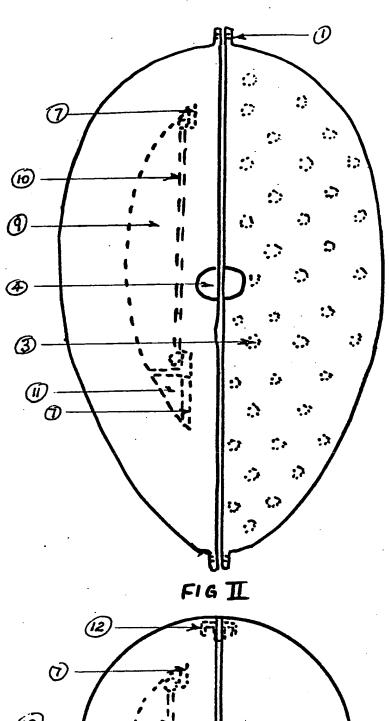
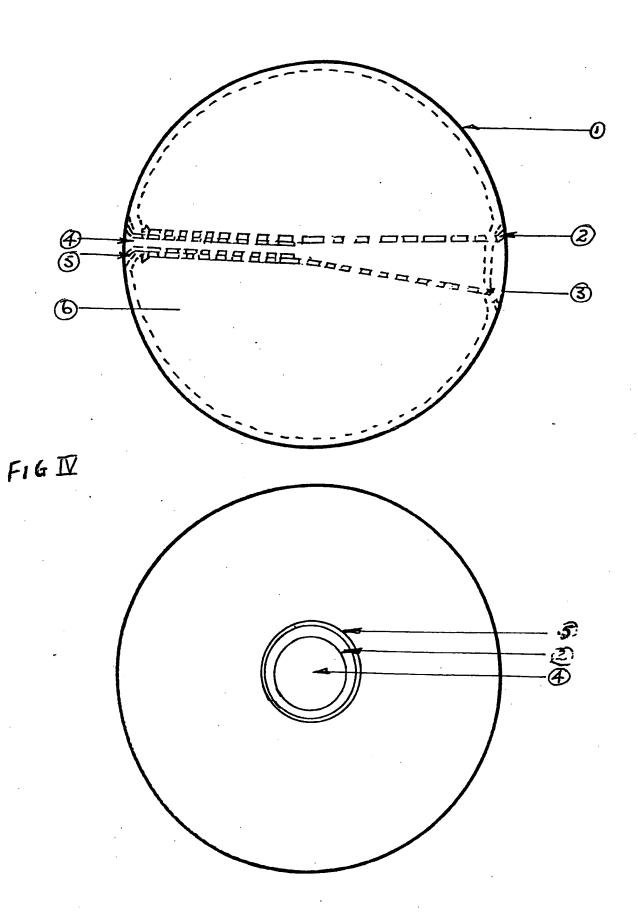


FIG III

4



TITLE

A Device for Containing Fishing Baits

It is generally accepted that in order for a fish to take a bait on an anglers hook, the fish must be lulled into a false sense of security. This is achieved by providing free samples of bait to the fish, a process termed groundbaiting. This attracts fish into the vicinity where the angler is fishing. It is common practice to catapult free offerings into the water. The closer the free offerings are to the hook bait the better. Anglers have been encouraged by bait manufacturers and via angling media to wantonly disperse their baits in an attempt to operantly condition the fish into consuming their baits, rather than the natural flora and fauna from their aquatic eco-system.

There is now an increasing awareness and concern about the environmental impact of fishing. Especially the current trend of using boiled baits that are preserved for the convenience of the bait industry. These preserved baits are profilagately dispensed and the fish are unable to consume them all. These baits rot and contaminate the water as bacteria multiply in the microenvironment of the bait, with the possibility that the chemical constituents maybe metabolised to potentially toxic or teratogenic hazards to the fish and their environment.

It is an object of the present invention, to increase the efficacy of anglers bait, and enable anglers to resume fishing with natural baits at the extreme ranges currently cast. Fish in large lakes are more easily caught at long-range as they receive less angling attention there. Until now, the only baits possibly used at long range were boiled baits or particles. Many free offerings do not land where the angler would desire, this leads to undecessary amounts of bait entering the food chain, as the angler wants baits near his hook bait.

According to the present invention there is provided a container for fish bait adapted for connection to a fishing line and capable of being cast, the container being designed to release the contained bait when it is in the water. To minimise tangles at casting the hook bait can be placed within the container. This facility also protects soft baits such as maggots, worms mussels etc. from the force of the cast. Fish are not used to such natural baits, being presented at long range and therefore are not suspicious of natural hook baits presented to them at long-range.

The device may have a compartment separated by a sprung semipermeable membrane diaphragm. The fisherman is able to place
powdered bait, flavourings, attractants - whether natural or
man-made, in the compartment. the nature of the semipermeable membrane harnesses the osmotic potential of the
powdered bait. When immersed in water the powders soak up the

water and create an osmotic pressure gradient. The attractants are pushed out via the osmotic pressure, providing a constant slow release mechanism to attract fish to the free offerings and the hook bait.

The device's abilities to accurately place free baits with the hook bait; its reservoir of fish attractant in the semipermeable compartment; and its ability to protect soft natural baits at long range; make it an important new development in angling and hopefully help stem the tide of overbaiting and polluting the angling environment.

The container is specifically designed for the application of angling. It was designed to alter fishing behaviour and thereby reduce the environmental impact of current fishing activities. Particularly fishing with boiled baits. Said boiled baits are readily available to the public and are promoted in the angling media. The result has been a catastrophe in some fishing environments, whereby the wanton application of boiled baits has destroyed the delicate balance within the aquatic ecosystem. Excess bait that fish are unable to eat, is left to rot on the bottom of the lake. The current practice of preserving baits' "shelf life" for the convenience of fishermen and women, and the bait industry, has worrying implications for the toxicological/teratogenic effects within the aquatic ecosystem.

The advantage of the container is that by dissolving when its useful life as a bait has finished, it does not represent a microenvironment of an anaerobic medium within which bacteria would otherwise propagate, with their potential effects of metabolising the rotting bait to produce a toxic metabolites. The container's contents when liberated, are readily available to animals at the bottom of the food chain, not trapped as a monument to the profligate bait application that is unfortunately advocated by bait manufacturers.

Not only is the container beneficial to the food chain, but it represents a fundamental advantage over existing boiled baits. Namely its versatility in its application as a bait. It is generally accepted that fish locate their nourishment by vision and by their olefactory capabilities. Because dried powders or pastes of high nutritional value can be utilised without fear of attention from fish fry destroying the hard shell, the properties of the bait can be dissipated throughout the water, without the hindrance of the boiled baits coagulum, that is, the attractiveness of the bait is not locked in. Indeed the bait does not suffer the denaturing effects of heat that are currently employed to harden the bait. This means that flavours and additives which the fisherman use in baits, can be kept to a minium as they are not boiled or destroyed.

The unique aspect of the container, is that hitherto inappropriate baits such as bloodworm or maggots can be presented to large fish without fear of fish fry taking said

baits. Indeed, the live baits will secrete their own metabolites, which it is generally believed is especially effective in attracting fish. Live baits and powders can be utilised together synergistically, increasing the dissipation of the powders by the movement of the live bait.

The colour of the bait can be changed at the bank side by the addition of food dyes. The container is designed to slowly dissolve so that it represents a source of constant attraction due to the ingredients of the shell.

The invention will now be described by way of example, with references to the accompanying diagramatic drawings in which:-

- Figure (1) is an opened plan view
- Figure (2) is a closed view
- Figure (3) is a end view
- Figure (4) shows two views of a different container

In Figure 1, a hollow shell (2) is formed from preferably plastic, and is of generally aerodynamic form. In this example, an oval. This shell is split into two or more, not necessarily equal parts. The shell halves are joined together by a membrane of plastic or preferably a spring hinge (12). Said hinge (12) held in place in each shell by a slot, grip or ledge. Said hinge can be fixed into place via nuts, screws, glue or friction.

The outer rim of the shell at equal opposing positions has placed a protrusion (4) enabling a ring or twine being tied to said protrusion, in this diagram called a clip (4). Said ring or twin to dissolve upon contact with water.

The outer shell has provisions to allow windows to be placed in the shell wall (3). Said windows are achieved by small localised thin wall.

The Angler decides how many holes he wants, if at all. A protrusion at the one end of the shell has a hole placed through it to enable the fishing line to be tied to the shell (1). At the base of the shell a similar ring provision is located (5). Said location can in fact be at any position around or in the shell as the bait and hook are attached to this fixture and contained within the shell during casting. This provision however can be dispensed with if the Angler decides, relying on the shell being tied to the line and the line continuing past the shell to whichever length the angler decides to fix his hook.

Within the shell, provision is made for a retained ledge (6) to enable a sprung diaphragm (10) to be placed and retained in position. Provision is also made for a compartment to be created to retain the weight required to lower the shell to the water floor (11). If required a buoyancy weight can be substituted enabling the shell to float at the height within the water that the angler decides. The diaphragm and weight

compartment are retained by an inner placed securing ring (7), located via provision within the shell of notches, blind holes or groves (8). Said inner ring to be firmly fixed to enable the diaphragm compartment (9) to contain substances without the diaphragm (10) being dislodged.

The shape and size of the shell can vary according to the type of fishing, as it can vary dependent on the strength of line used and the preferred length of cast required.

In Figure 4, Item (1) is the hollow shell, in this instance shown as a circle.

Item (2) is the female rivet, preferably made from thin walled plastic.

Item (3) shows in this instance the rivet perforated to allow substances to leach out. This perforation could also be achieved via slots along its length.

Item (4) shows the male rivet which when pushed into the female rivet complete the retention of the retained substance, and allows the bait line to pass freely through the centre of the hollow container.

Item (5) shows the rivets both male and female with a thin walled flange, thereby preventing the rivets from collapsing upon themselves within the said internal length of the hollow containers. This can also be achieved by recessing the opening so allowing the rivets to sit in the wall thickness of the container.

Item (6) the hollow space, to be filled with the anglers choice of substances.

CLAIMS

- 1) A container for fish bait adapted for connection to a fishing line and capable of being cast, the container being designed to release the contained bait when it is in the water.
- 2) Said container (1) is aerodynamic to minimise air resistance to optimise casting of said container.
- 3) The container (1) is made of one or more parts that fit together to form an aerodynamic shape (2).
- 4) The container (1) is designed to release a baited hook and contained bait when it is in the water.
- 5) The container (1) is designed to substitute the standard weights employed in angling for casting the hook and bait into the water. The contained bait provides the necessary weight.
- 6) The container (1) is held closed by poly vinyl alcohol material or similar material which dissolves on contact with water.

- 7) The container (1) is designed to open underwater, with or without the aid of a spring mechanism.
- 8) There is provision within the hollow container (1) for inserting a sprung semi-permeable diaphragm which partitions a compartment for bait that is not free to scatter when the container opens.
- (9) There is provision for a residual weight in the container, to ensure the bait container remains close to the scattered baits.
- 10) There is provision for the angler to customise the bait container by puncturing thin windows of plastic. This is of particular use if maggots or worms are contained and the angler wants a slow release of them. PVA is not used to tie the shell together.
- 11) A hollow container for bait (a) for fish attraction generally.
- 12) Attached to line or hook by means of a device that is inserted into the hollow container.
- 13) Said device (2) has the ability to let water circulate and thereby emit the contained baits properties throughout the water to attract fish.

- 14) It is preferred that the hollow container is made from a material that dissolves in the water, so that the contained bait can dissipate once the useful life of the bait has finished.
- 15) Bait (A) pertains to all generally used baits in fishing, whether:-

Alive natural baits - worms, maggots, mussels etc

Vegetable natural baits - sweetcorn, silkweed etc

Man-made baits - bread, luncheon meat etc

Manufactured baits - powders of nutritional value,

pastes, chopped up "boilies"

Additives - flavours, oils, amino acids, emulsifiers etc

- Provision for buoyancy by way of beads of expanded polystyrene inserted with the bait into the hollow containers can be achieved easily.
- 17) A container designed to be connected on a line and able to be cast, said container to be capable of retaining fishing baits within said container and releasing said baits when emersed in the water.

Patents Act 1977 Examiner's report to the Comptroller under Section 17 (The Search Report)

Application number

9108981.3

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Relevant Technical fields	Search Examiner
(i) UK CI (Edition K) Ala	
(ii) Int CI (Edition 5) AOIK	R F PHAROAH
Databases (see over) (i) UK Patent Office	Date of Search

Documents considered relevant following a search in respect of claims

ALL

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
x	GB A 2226743 (FAIRELL)	
x	GB 2194721 (SAT) see soluble plug 42, Figure 2	
x	GB 1261294 (M E P P S)	
x	GB 1226912 (H A J HALL)	
x	GB 1119272 (R L SANDERSON)	
X	US 4023300 (VIETHS) see water soluble retention means 46, Figure 1)	
	The above citations are the best examples chosen from a number of relevant documents	·
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Category	Identity of document and relevant passages	Relevant to claim(s)
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Categories of documents

- X: Document indicating lack of novelty or of inventive step.
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